

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAZUO HIRAI

Appeal No. 96-0071
Application 08/306,437¹

ON BRIEF

Before GARRIS, WARREN and KRATZ, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner finally rejecting claims 13 through 31.²

We have carefully considered the record before us, and based thereon, find that we cannot

¹ Application for patent filed September 12, 1994. According to appellant, this application is a continuation of application 08/064,554 ('554 application), filed May 21, 1993, now abandoned, which application is a continuation-in-part of application 07/943,420, filed September 14, 1992, now abandoned.

² Amendment of January 10, 1994 in the '554 application (Paper No. 6); amendment of September 12, 1994 (Paper No. 12)..

sustain the ground of rejection of the appealed claims under 35 U.S.C. § 103 over Hirai.³ We agree with the examiner that, *prima facie*, one of ordinary skill in this art following the teachings of Hirai would have reasonably combined a polytetrafluoroethylene (PTFE) having a three dimensional network structure forming ability, as represented by the tradenames “Teflon 6J” and “Teflon 7J”, and a granulated PTFE, as represented by the tradenames “Rublon L-2” and “Rublon L-5”, together in an amount as specified in Hirai for the PTFE ingredient, with other ingredients as specified by the reference, with the reasonable expectation of forming a sulfide polymer composition for a sliding member as taught in the reference.⁴ Indeed, as pointed out by the examiner (answer, pages 3-4), one of ordinary skill in this art would have been motivated to combined two materials that are disclosed in the art to be used for the same purpose with the reasonable expectation that the resulting composition would have the same or similar properties. *See, e.g., Merck & Co. v. Biocraft Labs, Inc.*, 874 F.2d 804, 807-08, 10 USPQ2d 1843, 1845-47 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989); *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

As evidence of nonobviousness, appellant presented a series of declarations under 37 CFR § 1.132⁵ wherein the reported data demonstrates that the use of a combination of both types of PTFE in the amounts specified in the claims achieves results with respect to all of the physical characteristics recited in the appealed claims that indeed differ from the results in the same properties achieved with the use of either type of PTFE alone. We cannot agree with the examiner’s evaluation of the evidence in the declarations. We find that while one of ordinary skill in this art would have reasonably expected from the teachings of Hirai that a composition containing a combination of the two types of PTFE in the amounts specified in the claims would have similar tensile strength and elongation than would be the case for a composition containing “Rublon L-5” granulated PTFE alone, *compare*

³ See page 2 of the answer. We refer in our opinion to the translation of Hirai provided by appellant in the amendment of January 10, 1994 in the ‘554 application (Paper No. 6).

⁴ We find that the two types of PTFE required by claims 13, 21 and 31 are defined in part in appellant’s specification (pages 6-8) by the same tradenames used in Hirai (pages 3-4).

⁵ The declarations were filed on January 10, 1994 and May 16, 1994 in the ‘554 application (Papers No. 6 and 8) and on September 12, 1994 and January 9, 1995 (Papers No. 13 and 15).

Merck & Co., 874 F.2d at 808, 10 USPQ2d at 1847, the evidence demonstrates that the replacement of even 10 wt% of “Rublon L-5” with “Teflon 7J” results in a composition with significantly improved tensile strength and elongation. In similar manner, the replacement of even 10 wt% of “Teflon 7J” with “Rublon L-5” results in a composition with significantly improved dynamic coefficient of friction and wear depth values. Accordingly, in considering *all* of the evidence in the declarations as a *whole*, we find that, on this record, the evidence demonstrates that the results obtained with the claimed compositions with respect to *all* of the specified physical properties were unexpected. *See In re Nolan*, 553 F.2d 1261, 1267, 193 USPQ 641, 644-45 (CCPA 1977).

Accordingly, based on our consideration of the totality of the record before us, we have weighed the evidence of obviousness found in *Hirai* with appellant’s countervailing evidence of and argument for nonobviousness and conclude that the claimed invention encompassed by the appealed claims would have been nonobvious as a matter of law under 35 U.S.C. § 103. Thus, we reverse the examiner’s ground of rejection.

The examiner’s decision is reversed.

Reversed

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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CHARLES F. WARREN)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
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